

CLAIMS

1. A portable modular safety rail for protecting workers during building construction and remodeling comprising,

5 a) at least two upright stanchions having a front, a back, a right side, a left side, a top and a bottom, said bottom having a flat mounting plate attached there onto, with said mounting plate removably fastened onto a building,

 b) a plurality of connection members protruding from said right side and said left side of said stanchion,

10 c) at least two adjustable length rails engaging said connection members on each end forming a safety rail section module, and

 d) pivotal attachment means fastening said rails to said connecting members such that the safety rail may be horizontal when said stanchions are attached to a level surface or said stanchions may be angled to accommodate stairs.

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2. The portable modular safety rail as recited in claim 1 wherein said upright stanchions have a configuration selected from the group consisting of a square shape, a round shape, a rectangular shape, a channel shape, a structural beam shape and a polygonal shape.

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3. The portable modular safety rail as recited in claim 1 wherein said upright stanchions are formed of a material selected from the group consisting of steel, aluminum, fiberglass and thermoplastic.

25 4. The portable modular safety rail as recited in claim 1 wherein said upright stanchions further comprise a cap on said top.

5. The portable modular safety rail as recited in claim 1 wherein each upright stanchion further comprises, said flat mounting plate having plurality of holes therethrough for bolting onto building surface.

5 6. The portable modular safety rail as recited in claim 1 wherein said connection members further comprise a plurality of round rings selected from the group consisting of welded rings, butted rings and weldless forged rings.

7. The portable modular safety rail as recited in claim 6 wherein said plurality of
10 round rings are attached to said stanchions by a weld seam.

8. The portable modular safety rail as recited in claim 1 wherein said plurality of connection members further comprise a plate member having a radial end and a bore therein, welded with a weld seam to the stanchions.

15 9. The portable modular safety rail as recited in claim 1 wherein said plurality of connection members further comprise a pair of flat plates extending away from the stanchion's left side and right side, each flat plate attached to said stanchions on the front and the back forming a channel shape connecting member, said flat plates having bores
20 therein for insertion of said pivotal attachment means.

10. The portable modular safety rail as recited in claim 1 wherein said adjustable length rails further comprise a outer section and an inner section forming a telescoping rail with the inner section slipping inside the outer section in an adjustable length manner,
25 said rails further having a hole therethrough adjacent to each distal end and a notch top and bottom for receiving said pivotal attachment means.

11. The portable modular safety rail as recited in claim 1 wherein said adjustable length rails further having a shape selected from the group consisting of a square shape, a round shape, a rectangular shape and a polygonal shape.

5 12. The portable modular safety rail as recited in claim 11 wherein said adjustable length rails are formed from a material selected from the group consisting of steel, aluminum, fiberglass and thermoplastic.

13. The portable modular safety rail as recited in claim 1 wherein said adjustable
10 length rails further comprise a chain.

14. The portable modular safety rail as recited in claim 13 wherein said chain includes a hook on each end for interfacing with said connection members to form an adjustable length.

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15. The portable modular safety rail as recited in claim 1 wherein said pivotal attachment means further comprises a fastener selected from the group consisting of a safety snap pin, a hitch pin, a self locking clevis pin, a T-handle quick release pin, a pushbutton quick release pin, a ring-grip quick release pin, a T-handle quick release self
20 locking pin, a self locking lynch pin, a snap lock pin and a hairpin cotter.

16. A portable modular safety rail for protecting workers during building construction and remodeling comprising,

a) at least two upright stanchions each having a flat mounting plate for
25 fastening onto a building,

b) a plurality of connection members protruding from each stanchion,
at least two adjustable length rails engaging the connection members, and

c) attachment means for fastening the rails to the connecting members forming a safety rail section.

17. A portable modular safety rail for protecting workers during building construction and remodeling comprising a rail section module having an upright stanchion on each end attached to a building with telescoping rails pivotally attached
5 between each stanchion such that the rail section may be horizontal when said stanchions are attached to a level surface or said stanchions may be angled when accommodating stairs, also other rail section modules may be attached together to accommodate specific building dimensional requirements.